

Features

- MOUNTS FLUSH WITH PANEL.
- LOW POWER CONSUMPTION.
- SUITABLE FOR AUDIO PANEL INDICATOR.
- LONG LIFE - SOLID STATE RELIABILITY.

L1034HD BRIGHT RED

L1034GD GREEN

L1034ID HIGH EFFICIENCY RED

L1034YD YELLOW

Package Dimensions

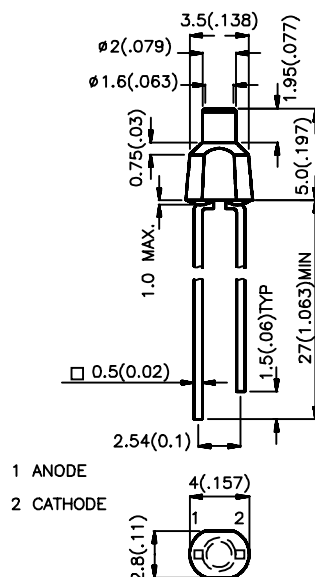
Description

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10 mA | | Viewing Angle |
|----------|---------------------------------|-----------------|---------------------|------|------------------|
| | | | Min. | Typ. | |
| L1034HD | BRIGHT RED (GaP) | RED DIFFUSED | 0.5 | 1 | 70° |
| L1034ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 5 | 8 | 70° |
| L1034GD | GREEN (GaP) | GREEN DIFFUSED | 2 | 6 | 70° |
| L1034YD | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 1.2 | 5 | 70° |

Note:

1. $\theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

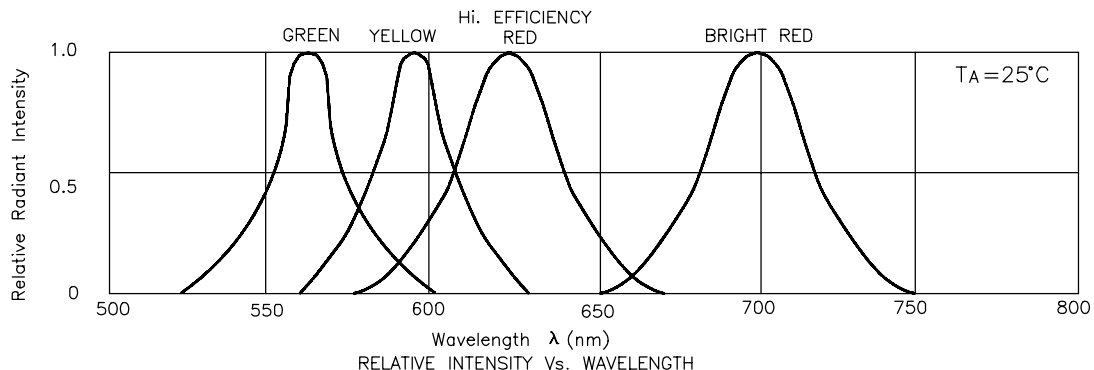
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|--|--------------------------|--------------------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | Bright Red High Efficiency Red Green Yellow | 700 625 565 590 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | Bright Red High Efficiency Red Green Yellow | 45 45 30 35 | | nm | IF=20mA |
| C | Capacitance | Bright Red High Efficiency Red Green Yellow | 40 12 45 10 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | Bright Red High Efficiency Red Green Yellow | 2.0 2.0 2.2 2.1 | 2.5 2.5 2.5 2.5 | V | IF=20mA |
| I _R | Reverse Current | All | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

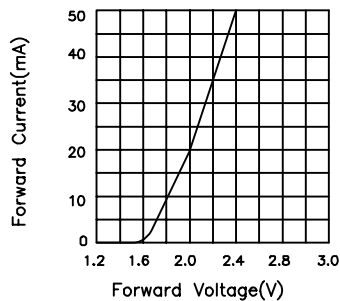
| Parameter | Bright Red | High Efficiency Red | Green | Yellow | Units |
|--------------------------------|---------------------|---------------------|-------|--------|-------|
| Power dissipation | 120 | 105 | 105 | 105 | mW |
| DC Forward Current | 25 | 30 | 25 | 30 | mA |
| Peak Forward Current [1] | 150 | 150 | 150 | 150 | mA |
| Reverse Voltage | 5 | 5 | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To + 85°C | | | | |
| Lead Soldering Temperature [2] | 260°C For 5 Seconds | | | | |

Notes:

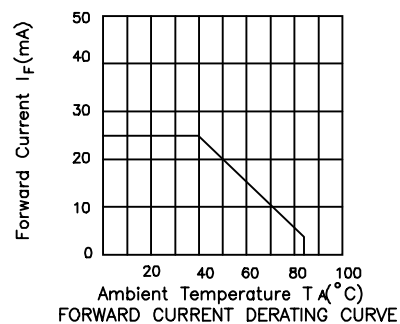
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



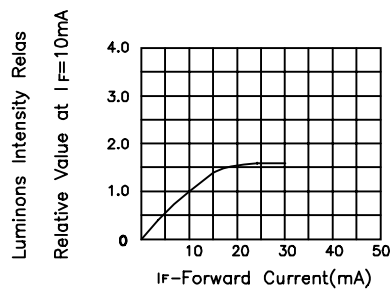
Bright Red L1034HD



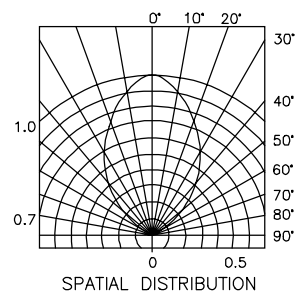
FORWARD CURRENT VS. FORWARD VOLTAGE



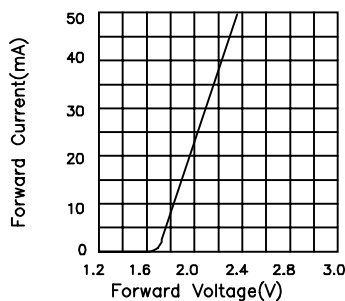
FORWARD CURRENT DERATING CURVE



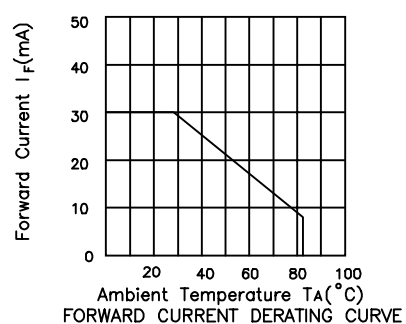
LUMINOUS INTENSITY VS. FORWARD CURRENT



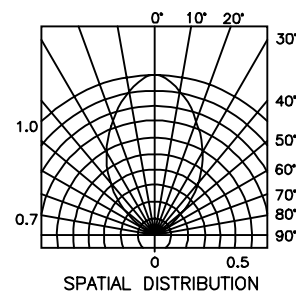
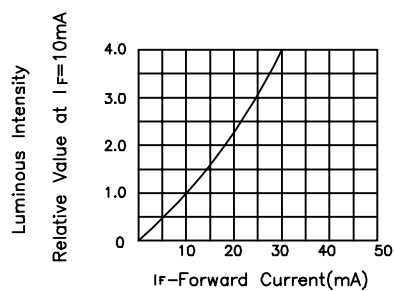
High Efficiency Red L1034ID



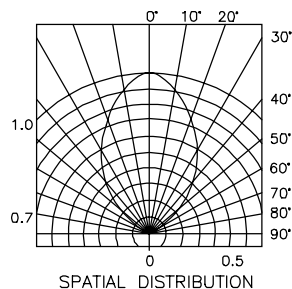
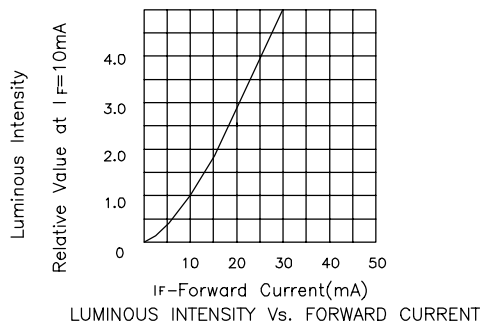
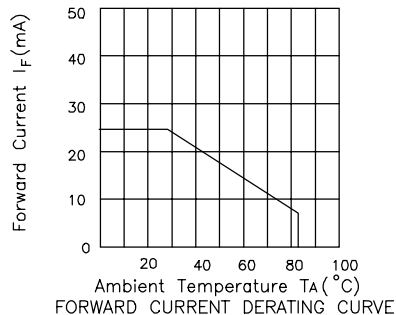
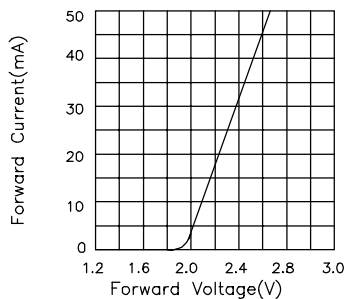
FORWARD CURRENT VS. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



Green L1034GD



Yellow L1034YD

